

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE Kazuo Miyaguchi XA-9120A 9810 01/08/2002 10/038,660 7590 01/07/2003 Mitchell W. Shapiro **EXAMINER** Miles & Stockbridge P.C. LEWIS, TISHA D 1751 Pinnacle Drive, Suite 500 McLean, VA 22102-3833 ART UNIT PAPER NUMBER 3681

DATE MAILED: 01/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)			
Office Action Summary		10/038,660		MIYAGUCHI ET A	·L. ^ /		
		Examiner		Art Unit	$-\mathcal{X}$		
		TISHA D. LEWIS		3681	_ (1)		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	Responsive to communication(s) filed on						
•	2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4)⊠ Claim(s) <u>1,2 and 4-10</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1,2 and 4-10</u> is/are rejected.							
·	Claim(s) is/are objected to.						
8) 🗌	Claim(s) are subject to restriction and/o	r election requirer	ment.				
Application Papers							
9) 🔲 -	The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)⊠ The proposed drawing correction filed on <u>28 October 2002</u> is: a)⊠ approved b)⊡ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)[	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority document	s have been rece	ived.				
	2. Certified copies of the priority document	s have been rece	ived in Applicatio	on No			
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14)∐ A	cknowledgment is made of a claim for domesti	c priority under 3	5 U.S.C. § 119(e	) (to a provisional	application).		
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 6)		(PTO-413) Paper No( atent Application (PT			
S. Patent and Tr PTO-326 (Rev		ction Summary		Part of	Paper No. 10		

### **DETAILED ACTION**

The following is a response to the amendment received on October 28, 2002 which has been entered.

## **Drawings**

The corrected or substitute drawings were received on October 28, 2002. These drawings are approved.

### Terminal Disclaimer

The terminal disclaimer filed on October 28, 2002 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. patent no. 6,347,558 has been reviewed and is accepted. The terminal disclaimer has been recorded.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Agari ('858). As to claims 1 and 2, Agari discloses a linear motion device including: an outer member (1),

an inner member (2) facing the outer member via a gap,

a plurality of balls (7) disposed between the members,

a plurality of spacers (50),

Application/Control Number: 10/038,660

Art Unit: 3681

the outer member being slidable to the inner member,

the spacer having concave surfaces facing two opposing balls (Figure 5),

a central portion (52 via 54) of the concave surfaces being diagonally rectilinear to an outer portion (55) of the spacer and the spacer being substantially in circular line contact (at 54) with the balls.

As to claims 4 and 8, Agari discloses the spacer formed as an integral member.

As to claim 7, Agari discloses the central portion (52) of the spacer (50) perpendicular to centers between the two opposing balls wherein the outer portion (55) is diagonally extending from opposite ends of the central portion to an edge of the spacer (via 53).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agari in view of Kaiser et al ('243). Agari discloses a spacer between opposing balls for a linear motion device, but does not disclose as to the material of the spacers.

Kaiser et al discloses a spacer (1) for a rolling bearing which can be made of different materials of plastic or metal (column 2, lines 56-58).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to design the spacers of Agari from plastic or metal in view of

Application/Control Number: 10/038,660

Art Unit: 3681

Kaiser et al to have self lubricating properties from the plastic spacer or high strength properties from the metal spacer.

## Response to Arguments

Applicant's arguments with respect to claims 1 and 2 have been considered but are most in view of the new ground(s) of rejection.

### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703)** 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence <u>not</u> permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on	
Typed or printed name of person signing this certificate:	(Date)
(Signature)	

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Application/Control Number: 10/038,660

Art Unit: 3681

### Conclusion

Page 5

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Horimoto et al discloses a linear motion device having spacers which can be made from plastic or steel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 703-305-0921. The examiner can normally be reached on M-Thur 8 AM TO 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 703-308-0830. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

Tdl

December 31, 2002

///wwwf/www.mow/ SHERRY/ESTREMSKY PRIMARY EXAMINER

AU3681 1-6-03